

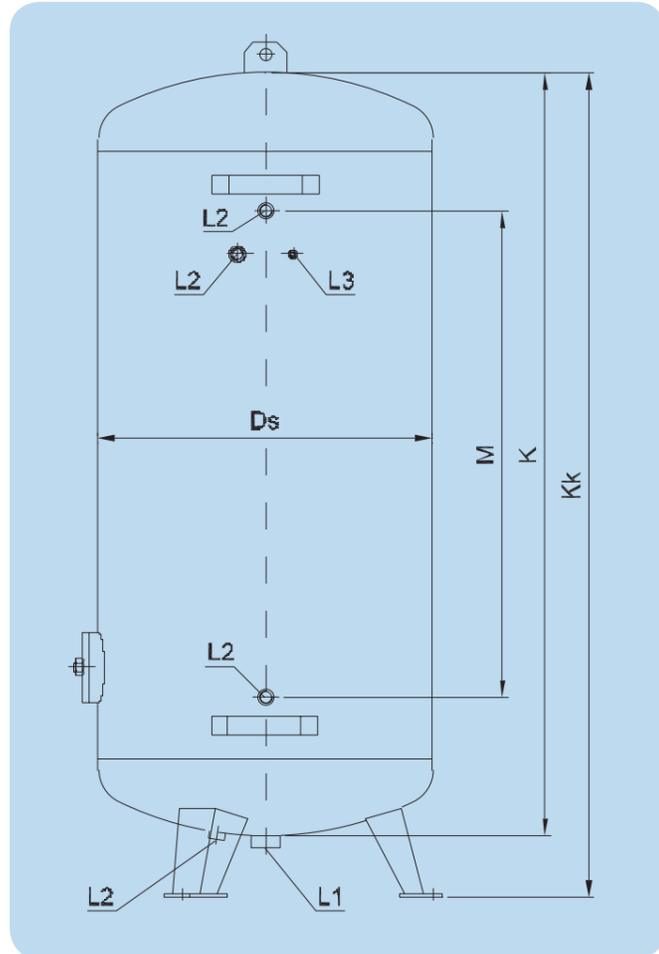
The Pumpulohja MAX pressure tank is a closed, air-filled pressure water tank, the storage capacity of which is 2.5 times that of standard tanks.

The pressure tanks are made of stainless steel EN1.4301.

The tank has a rubber bottom valve equipped with a float, which prevents pre-pressure from leaving the tank after it has been appropriately taken into use.

The standard capacities of Pumpulohja MAX pressure tanks are 150, 200, 300, and 500 litres, and the standard pressures are 6, 10, and 16 bar.

We also offer custom-made MAX pressure tanks in sizes up to 3000 litres, in various pressure categories, and they can also be made of acid-proof steel.



Capacity, litres	Measurements, mm				Units, R		
	Ds	Kk	K	Pk	L1	L2	L3
150	450	1150	1050	580	1 1/4"	1/2"	1/8"
200	450	1370	1270	800	1 1/4"	1/2"	1/8"
300	550	1355	1255	800	1 1/4"	1/2"	1/8"
500	650	1645	1545	1050	1 1/4"	1/2"	1/8"

### Use

When using the tank for the first time, check the pre-pressure and, if needed, adjust it according to the pump's starting pressure. The pre-pressure can be altered either by adding or removing air through the valve. Check the pressure on the pressure meter.

While the tank is on, monitor the level of the water through the glass gauge and, if needed, fine-tune the air pressure to reach the tank's maximum storage capacity.

*We reserve the right to make changes. E01109*

OY PUMPPULOHJA AB  
Yrittäjätie 4,  
FI-09430 SAUKKOLA  
Sales: +358 (0) 20 741 7229  
Fax: +358 (0) 19 371 011  
info@pumppulohja.fi  
www.pumppulohja



**Stainless steel membrane pressure tanks**  
**Stainless steel pressure water tanks**  
**Acid-proof pressure water tanks**  
**Galvanized pressure water tanks**

Pressure tanks and membrane pressure tanks are used for pressurized water systems in detached houses, on farms and in small communities, for example. The tanks are installed into the system after coldwater pumps.

**KPSV 50/6**

**KPSV 25/6**



Wall bracket or stand available for 50 l tank. Wall bracket available for 25 l tank. A fixed drum-shaped base is standard. 120 l tank comes with a fixed base.

The KPSV® tank can be opened and cleaned, and the membrane can be changed as needed.

The Pumppulohja KPSV membrane pressure tanks are made of stainless steel. Rubber membranes are of durable material suitable for use with foodstuffs. KPSV membrane pressure tanks can be opened on location without special tools if cleaning is required or the membrane is replaced. The pressure categories for the tanks are 6 and 10 bar, and heat resistance for the standard-structured tanks is +50° C. The in-stock sizes are 25 l, 50 l, and 120 l.

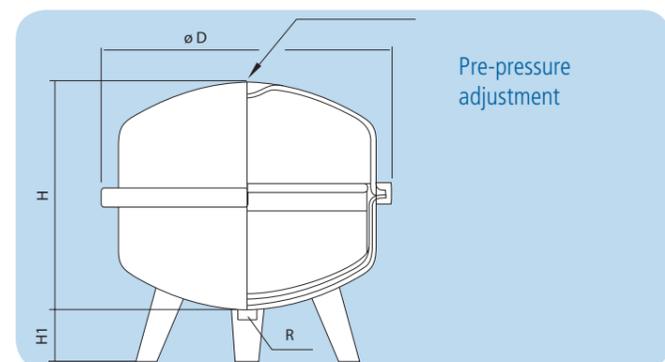
### Measurements

Capacity	Pressure	D	H	H1	R	
KPS 25	6	355	400	-	1"	Outside
KPSV 50	6	500	400	-	1 1/4"	Inside
KPSV 50	10	500	400	-	1 1/4"	Inside
KPSV 120	10	500	900	100	1"	Outside
KPSV 120	6	500	900	100	1"	Outside

### Advantages membrane pressure tanks

Compared to regular tanks, membrane pressure tanks offer the following advantages:

- Small size: storage capacity c. 2.5 times as much with the same outside measurements.
- Longer servicing periods: rarely needs checking of air pressure or pre-pressure.
- Water does not stand still and heat up in a membrane pressure tank as it does in a regular tank.
- The parts of a KPSV pressure tank can be changed without welding.



### Correct adjustment of pre-pressure

For best results, the pre-pressure of an empty membrane pressure tank should be c. 0.1–0.2 bar lower than the lower limit pressure as set by the pressure water plant for the pressure switch. If the lower limit of the pressure switch is changed, the pre-pressure of the tank must be adjusted accordingly. Air can be added or removed via the needle valve on the end of the tank end. A membrane pressure tank can be installed either horizontally or vertically.

### Recommended size of pressure tanks

The following table is based on the recommendation of electric motor manufacturers, which states that a motor should not start more than 30 times per hour. The figures in the table are suitable for water service in sparsely inhabited areas.

\*) The output of a pump refers to the actual output with regard to counter pressures and pipe resistance.

The resistance is usually between 2.5 and 3 bar whereby the output of the pump can be determined from the curve at 25–30 m.

The Pumppulohja product range also includes rustproof pumps for water service in sparsely inhabited areas. These pumps are suitable for detached houses, summer cottages, farms and water co-operatives.

### Comparison table for storage capacity

Tank (outside) capacity l	Pressure switch lower-upper limit, bar	Storage capacity	
		Membrane pressure tanks l	Standard tanks l
25	1,0 - 2,5	8,5	
25	1,5 - 2,5	5,7	
50	1,5 - 3,0	18,8	7,5
50	2,0 - 3,5	16,6	5,5
50	2,0 - 4,0	20,0	6,6
100	1,5 - 3,0	37,2	15,0
100	2,0 - 3,5	33,2	11,0
100	2,0 - 4,0	40,2	13,2
200	1,5 - 3,0		30,0
200	2,0 - 3,5		22,0
200	2,0 - 4,0		26,4

### Percentage of useful capacity compared to the total capacity

Starting pressure, bar	Switch-off pressure, bar	Membrane pressure tank	Regular tank
1,0	2,0	33,0	17,7
1,0	2,5	42,8	21,5
1,5	2,5	28,5	11,5
1,5	3,0	37,5	15,0
2,0	3,0	25,0	7,3
2,0	3,5	33,0	11,0
2,0	4,0	40,0	13,0
2,5	4,0	30,0	8,6
3,0	4,5	27,0	7,0
3,0	5,0	33,0	8,0
4,0	6,0	28,5	6,0
5,0	7,0	25,0	4,5

Pressure tanks are made from both stainless steel and black sheet metal. Tanks made out of black sheet metal are hot galvanized.

We have an extensive range of tank models. Our in-stock sizes include 100–500 litres, and the pressure categories range from 6 to 10 bar.

We also deliver custom-made, larger and smaller tanks. All tanks are PED 97/23/EC approved. PUMPPULOHJA pressure tanks can be used with water and air.

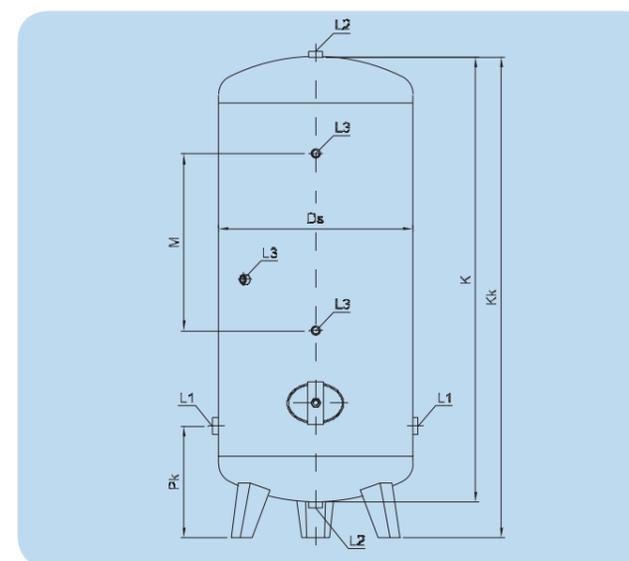
### Structural pressures

- Membrane pressure tanks 6 and 10 bar
- Pressure tanks 6 and 10 bar

### Operation temperature

- Standard tanks max. +50° C
- Custom tanks max. +100° C

### Galvanized tanks



Capacity litres	Measurements, mm						
	Ds	h1	h2	h3	h4	h5	h6
150	450	790	500	1010	85	1230	500
300	550	1100	700	1360	85	1570	675
500	650	1310	700	1610	85	1810	800

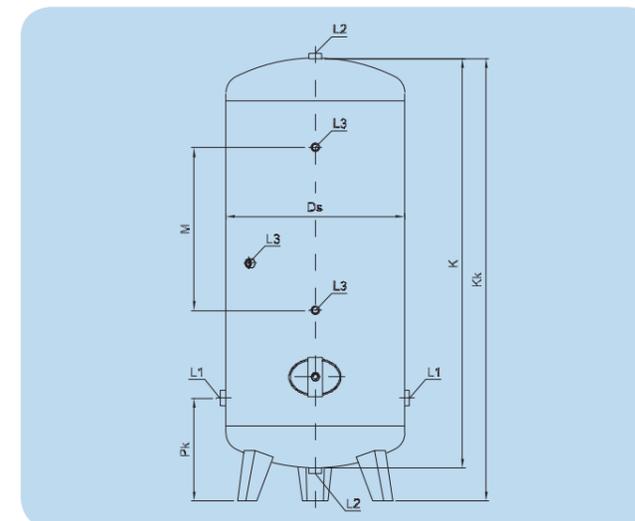
### Choice of tank based on pump output

The table below shows what part of the total capacity of the tanks is useful or represents storage capacity.

### Recommended size of pressure tank based on pump output

*) Output of pump l/min	Capacity of tank	
	Membrane pressure tank, litre	Standard tank, litres
10 – 15	25	60
15 – 20	25	100
20 – 30	50	150
30 – 40	50	150 – 200
40 – 60	2 x 50 tai 100	200
60 – 100	100	300
100 – 150	200	500
150 – 200	300	1000

Pressure water tanks, stainless steel, acid proof steel



Capacity, litres	Measurements, mm					Units, R		
	Ds	Kk	K	Pk	M	L1	L2	L3
100	400	980	880	310	500	1 1/4"	1"	1/2"
150	450	1120	1020	310	445	1 1/4"	1"	1/2"
200	450	1340	1240	310	500	1 1/4"	1"	1/2"
300	550	1375	1275	325	500	1 1/4"	1"	1/2"
500	650	1640	1540	335	500	1 1/4"	1"	1/2"

Other sizes according to offer.

### Things to consider when installing a pressure tank

The storage capability of a standard tank decreases as time goes by when pressurized air is absorbed into the water. Gradually, water fills the entire tank. The air must then be removed from the tank to maintain the storage capacity. To remove the air, the tank should be emptied or air should be let into the tank from the suction side of the pump. The servicing period can be considerably extended and the absorption of air reduced if the tank is installed such that the water running into the network does not pass through the tank, see figure below.

